



# Hurricane Florence Impact on Water and Wastewater Facilities

November 13, 2018

*Department of Environmental Quality*  
*Division of Water Resources*  
*Jim Gregson, Deputy Director*

Joint Legislative Oversight Committee on Agriculture and Natural and Economic Resources



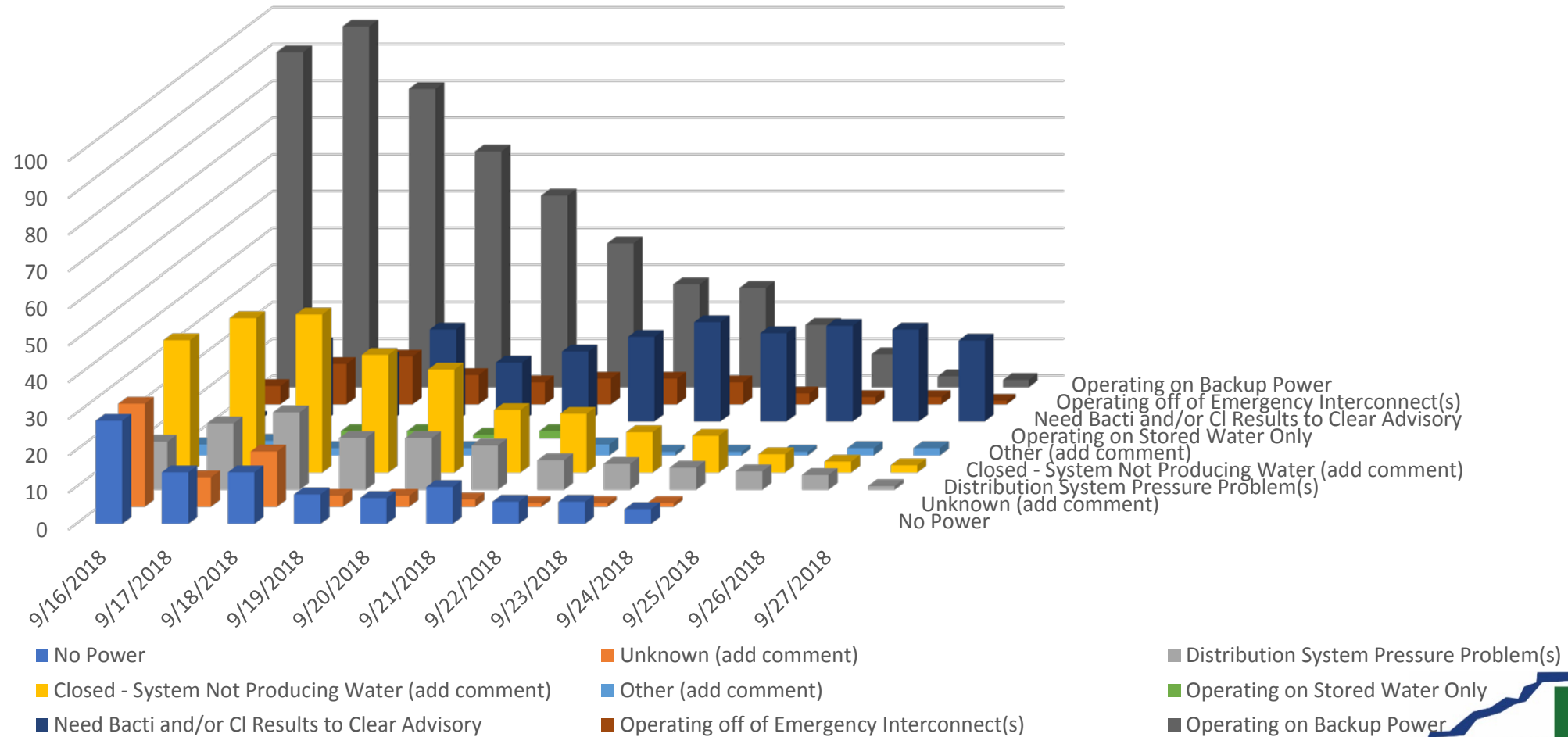
## *Public Water Facilities (758 Contacted in Impacted Area)*

Facility Status	Highest # of Systems Impacted	Date of Max Occurrence
Operating on Backup Power	98	9/17/2018
Operating off Emergency Interconnect(s)	13	9/18/2018
Need Bacterial and/or CI Results to Clear Advisory	27	9/23/2018
Operating on Stored Water Only	4	9/16 & 9/17/2018
Other (add comment)	4	9/17/2018
Closed - System Not Producing Water (add comment)	43	9/18/2018
Distribution System Pressure Problem(s)	21	9/18/2018
Unknown (add comment)	28	9/16/2018
No Power	28	9/16/2018



# Public Water Facilities (758 Contacted in Impacted Area)

Hurricane Florence - Water System Status



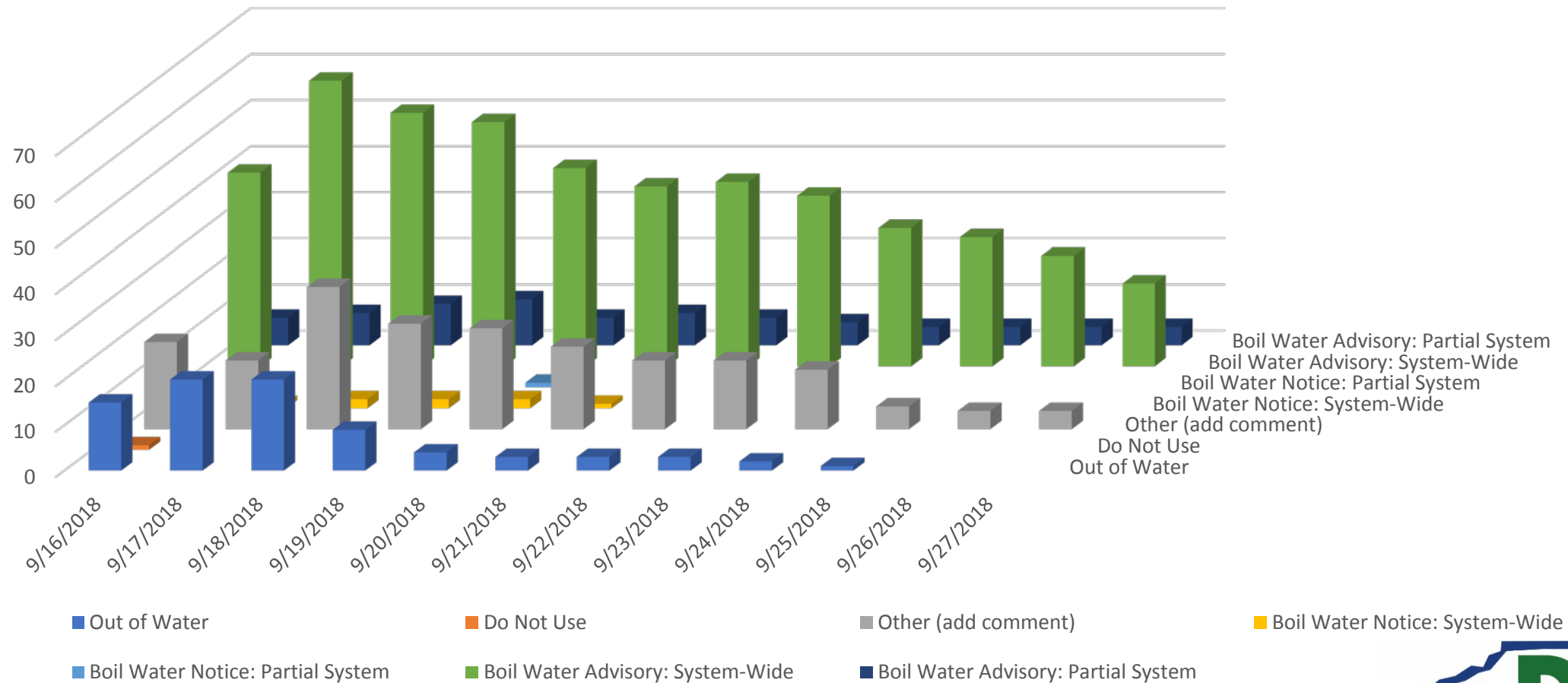
## *Public Water Facilities (758 Contacted in Impacted Area)*

Use Restriction	Highest # of Impacted Systems	Date of Max Occurrence
Out of Water	20	9/17 & 9/18/2018
Do Not Use	1	9/16/2018
Other (add comment)	31	9/18/2018
Boil Water Notice: System-Wide	2	9/18 & 9/19/2018
Boil Water Notice: Partial System	1	9/20/2018
Boil Water Advisory: System-Wide	62	9/17/2018
Boil Water Advisory: Partial System	10	9/19/2018



# Public Water Facilities (758 Contacted in Impacted Area)

Hurricane Florence - Water System Use Restrictions



## *Public Water Facilities (758 Contacted in Impacted Area)*

One Week Following Storm	Two Weeks Following Storm
758 Total Systems	758 Total Systems
16 Systems Not Producing Water	2 Systems Not Producing Water
8 Systems with Pressure Problems	1 System with Pressure Problems
6 w/o Power	0 w/o Power
28 Operating on Backup Power	0 Operating on Backup Power
7 Operating on Emergency Interconnect	0 Operating on Emergency Interconnect





# *Wastewater Treatment Plants (474 in Impacted Area)*

One Week Following Storm	Two Weeks Following Storm
474 Total Systems	474 Total Systems
433 Operational	457 Operational
24 Partially Operational	9 Partially Operational
15 Non-Operational	8 Non-Operational
2 Unknown	0 Unknown



# *Wastewater Systems*

## Bypasses

- 76 Bypasses at 59 Facilities
- 49.8 Million Gallons Total
- 44.6 Million Gallons to Surface Waters





# *Wastewater Systems*

## Sanitary Sewer Overflows

- 516 Overflows at 149 Systems
- 43.4 Million Gallons Total
- 43.2 Million Gallons to Surface Waters

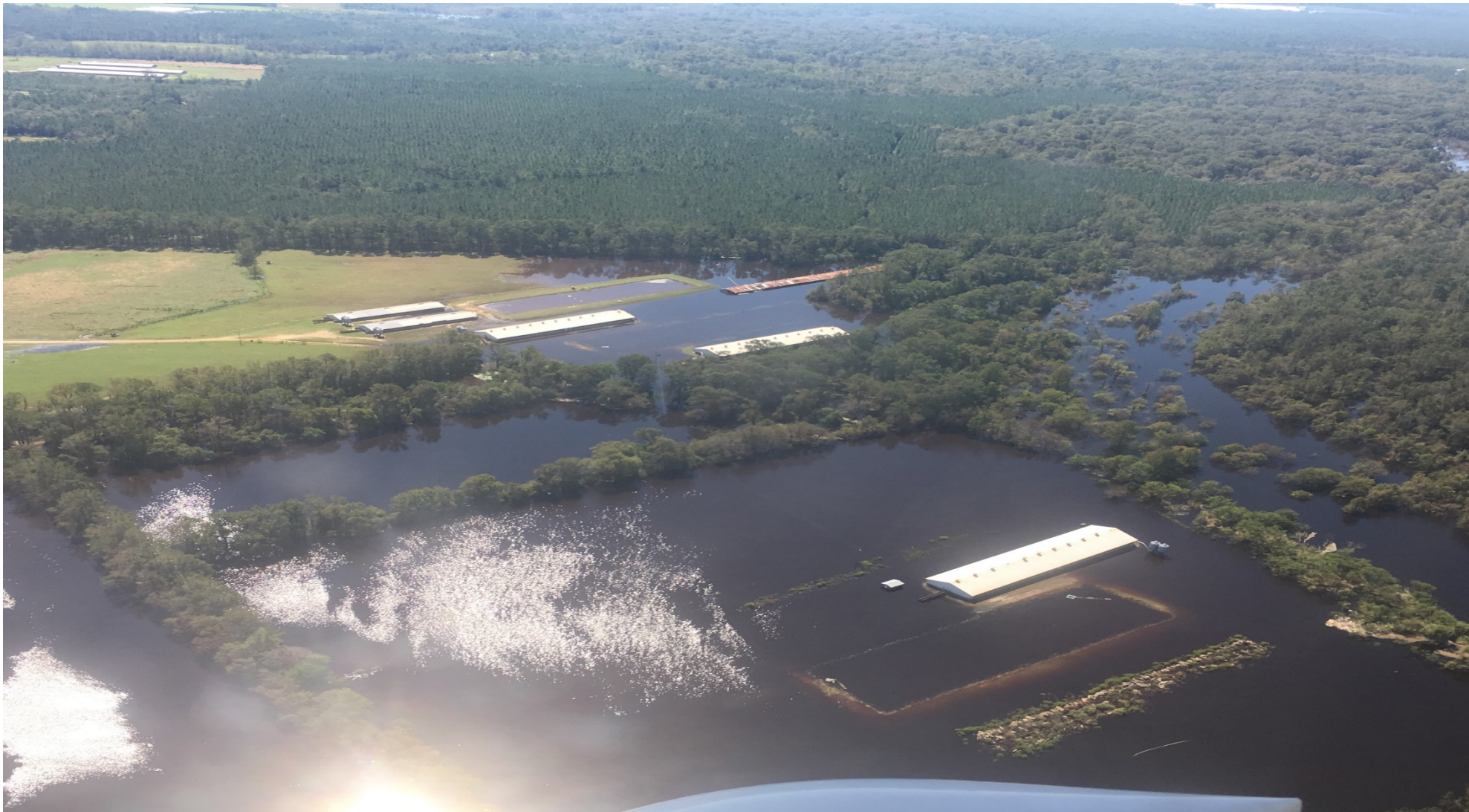


# *Animal Farms*

- 2143 Total Permitted Farms
- 3300 Total Lagoons
- 6 Lagoon Breaches
- 32 Lagoons Overtopping
- 10 Lagoons Inundated







## *Animal Lagoons*

Category	One Week Following Storm	Two Weeks Following Storm	Three Weeks Following Storm
Structural Damage	6	5	6
Discharges (Overtopping)	30	32	33
Inundation	21	9	10
Freeboard 0"	40	17	20
Freeboard 0-3"	35	39	20



# *Beach Nourishment, Channel Dredging, & Flood Mitigation Projects Needs Assessment For Hurricane Florence as of 11/08/2018*

<b><i>Beach Nourishment</i></b>	\$290,013,309
<b><i>Channel Dredging</i></b>	\$61,830,000
<b><i>Flood Mitigation</i></b>	\$750,000
<b>Total Estimated Cost</b>	\$352,593,309

